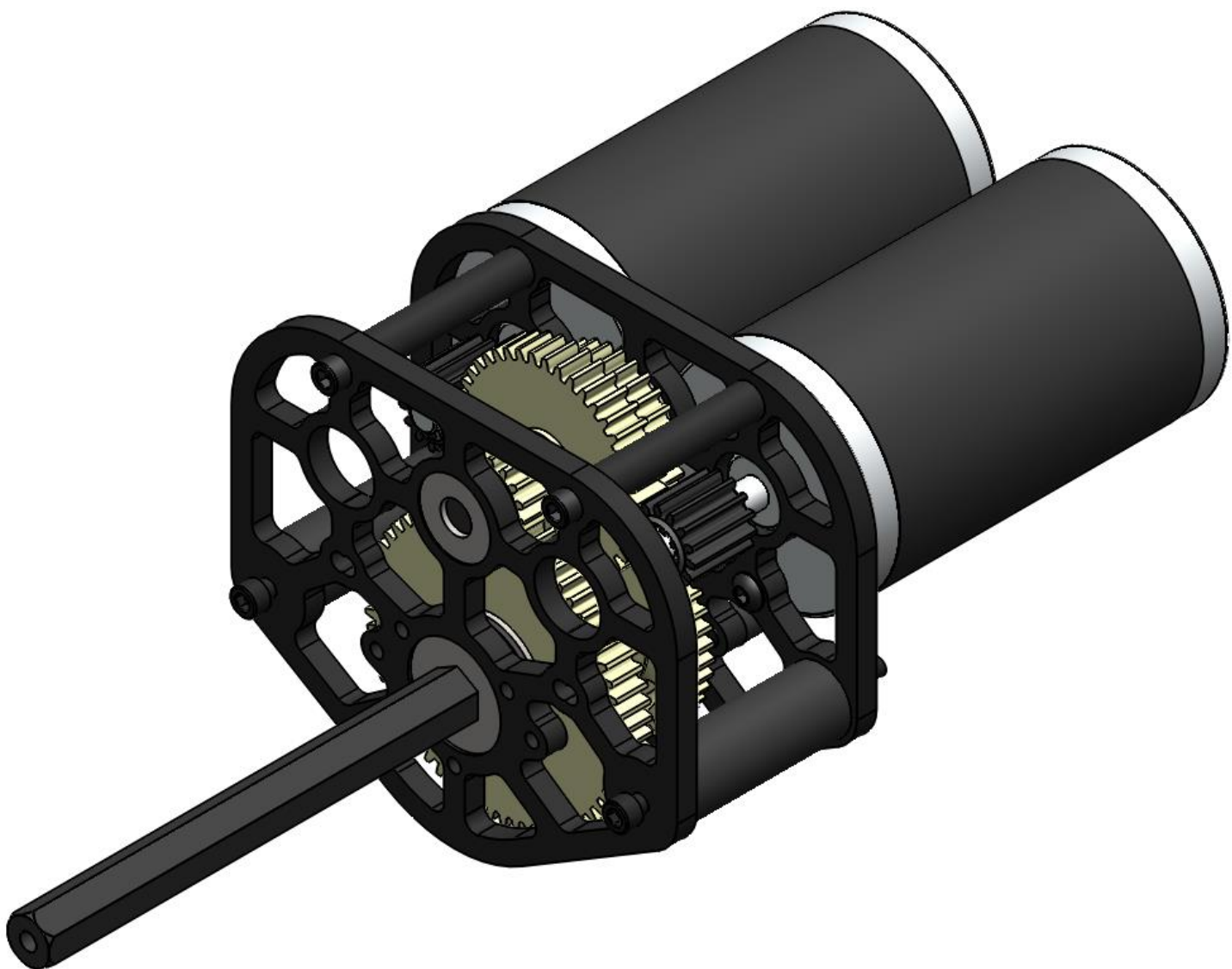


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WCP DS Gearbox – Dual Speed

WCP DS Gearbox Dual Speed

Assembly Instructions



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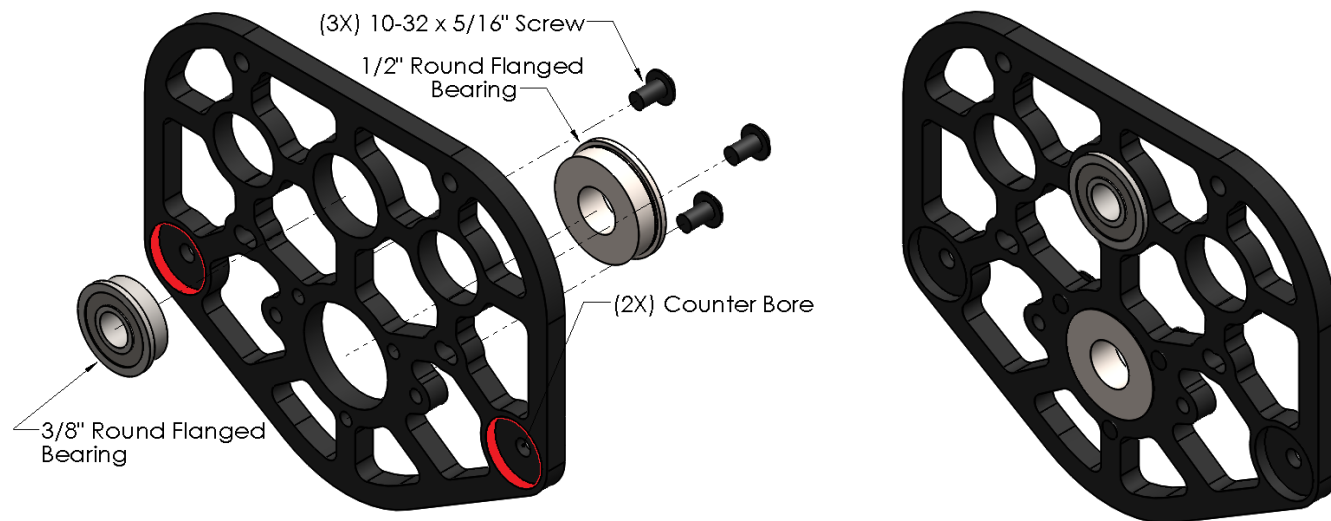
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Step 1:

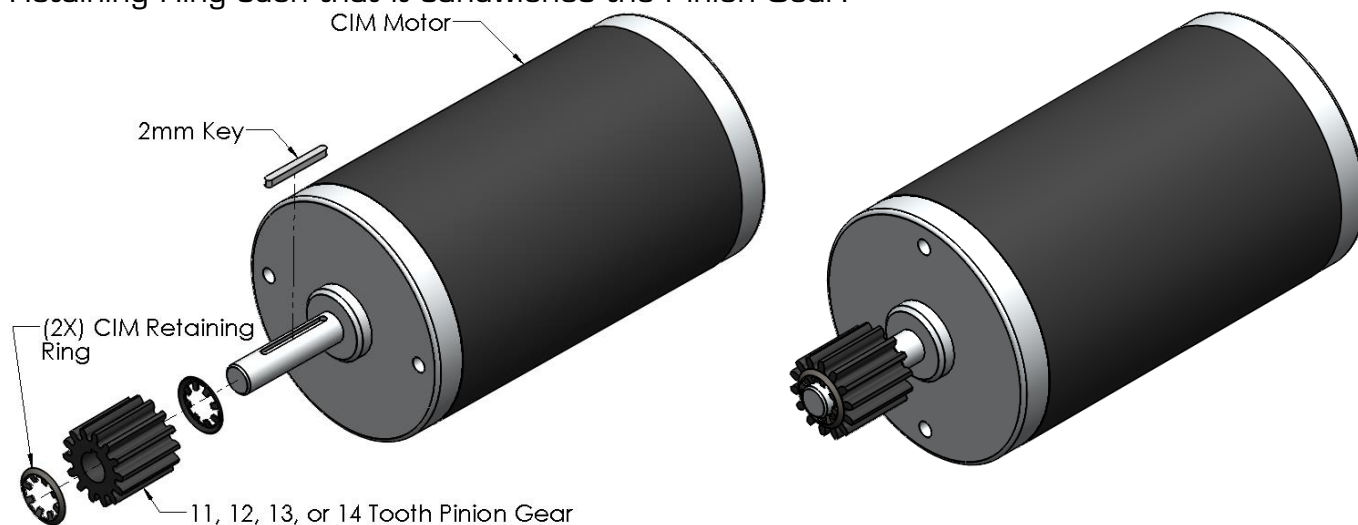
Insert the 1/2" Round Flanged Bearing and Contain with (3X) 10-32 x 5/16" screws. Insert the 3/8" Round Flanged Bearing.



Note: The 3/8" bearing needs to be installed on the same side as the Counter Bores.

Step 2:

Insert the 2mm Key. Slide the first CIM Retaining Ring just on. Press the Pinion Gear on so there is just enough room for the second CIM Retaining Ring. Finally, slide on the second CIM Retaining Ring such that it sandwiches the Pinion Gear.



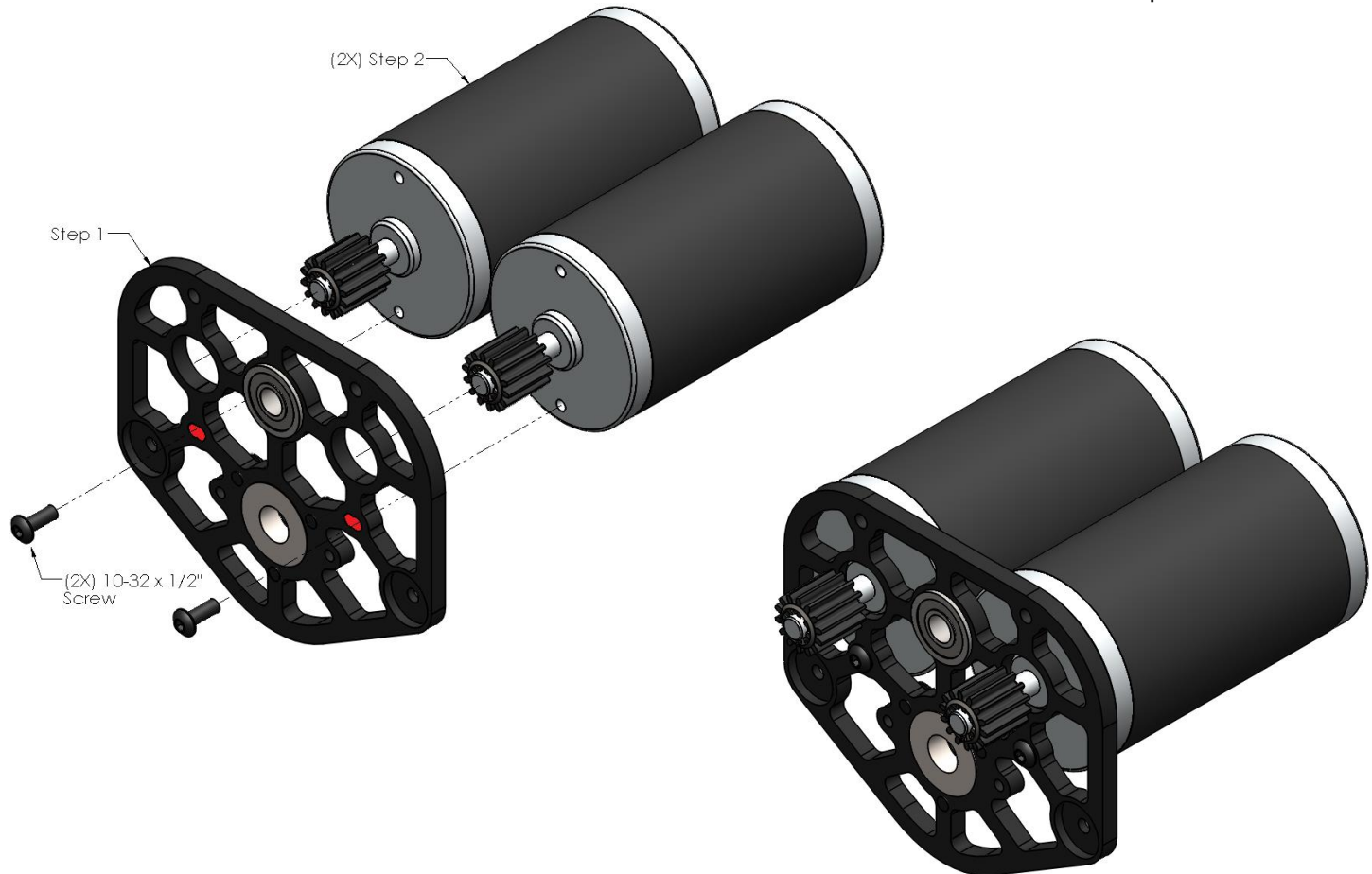
Note: If using 13 or 14 tooth CIM Pinion perform Step 3 before Step 2.

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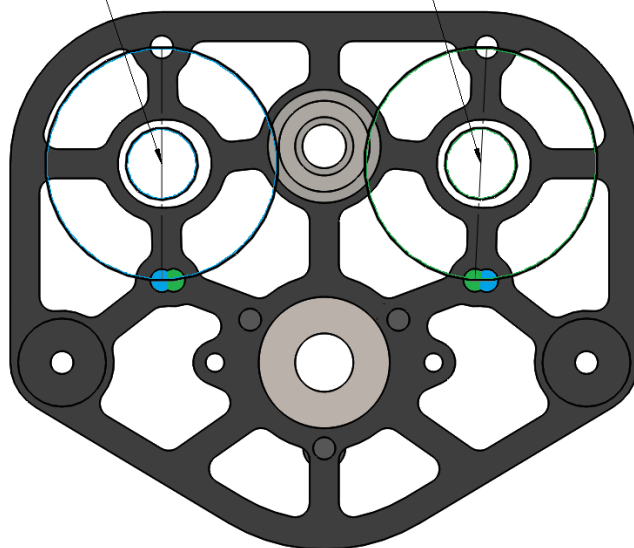
Step 3:

Mount up to (3X) Step 2 on Step 1 using (2X) 10-32 x 1/2" screws. Reference table to determine if the CIM Motor should be mounted in the INBOARD or OUTBOARD position.



Outboard CIM Position

Inboard CIM Position



Pinion Gear	Input Gear	CIM Position
11T	42T	INBOARD
12T	42T	INBOARD
13T	42T	OUTBOARD
14T	42T	OUTBOARD
13T	40T	INBOARD
14T	40T	INBOARD

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Step 4:

Slide the DOG and User Selected DOG High Gear onto the DS Output Shaft. Insert the DS Output Shaft and put on the 1/2" Snap Ring. Insert the Shifter Rod into the DS Output Shaft. Fasten the 4-40 x 1" screw through the DOG and Shifter Rod.



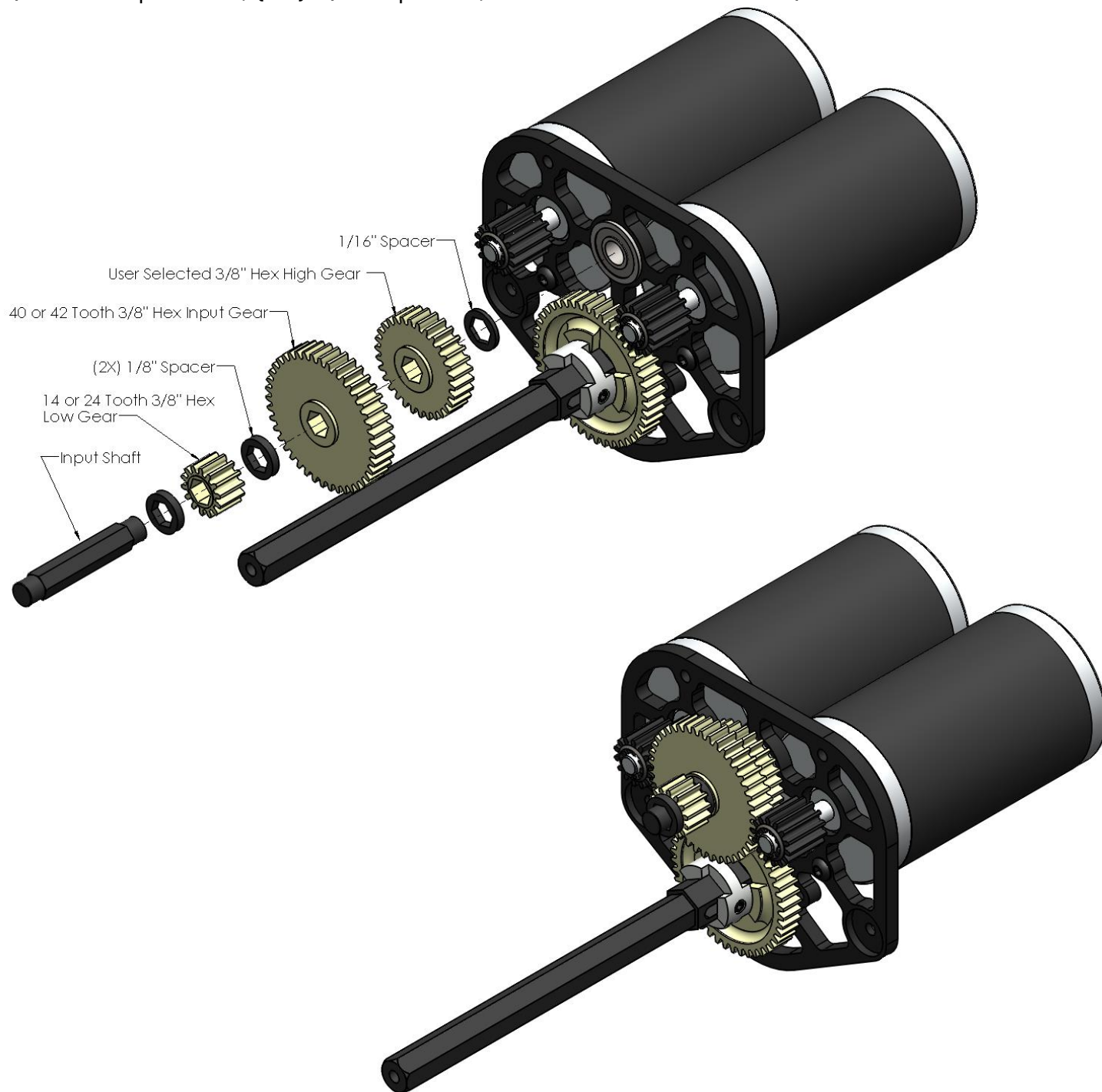
Note: Do not over-tighten 4-40 x 1" screw or binding may occur.

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Step 5:

Insert the Input Shaft, 1/16" Spacer, User Selected 3/8" Hex High Gear, 40 or 42 tooth 3/8" Hex Input Gear, (2X) 1/8" Spacers, and the 14 or 24 tooth 3/8" Hex Low Gear.



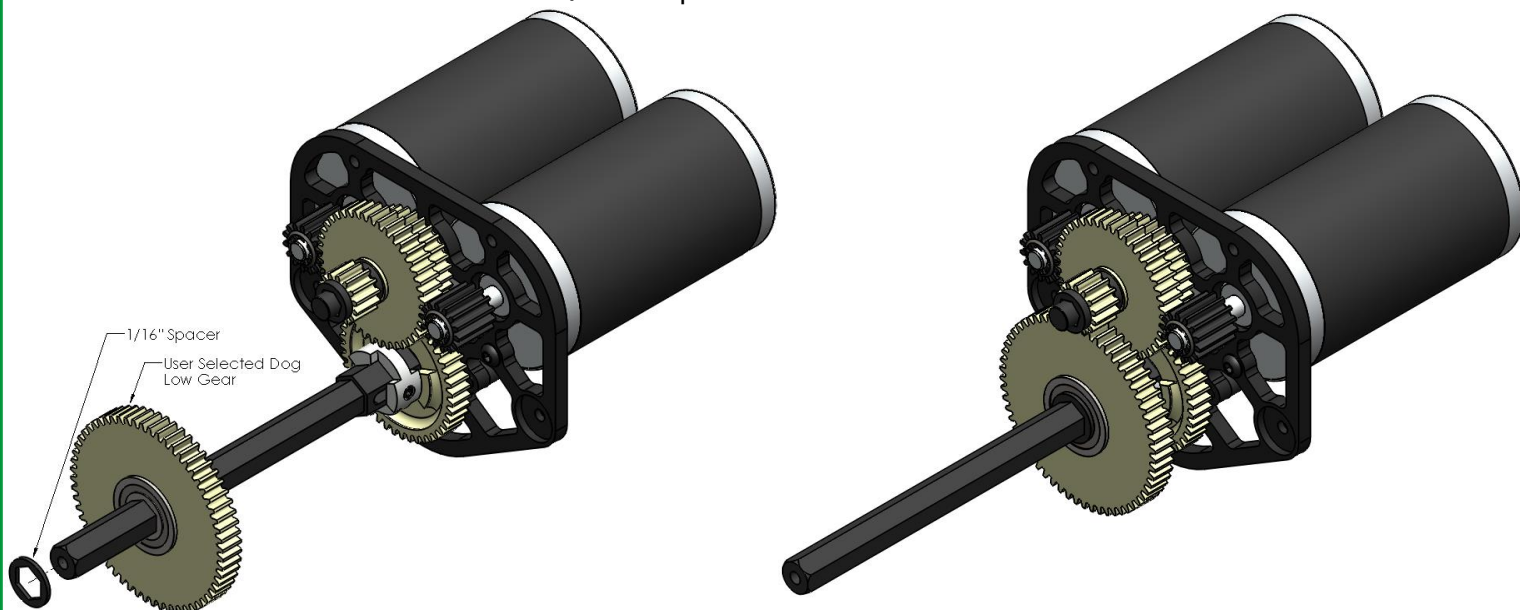
Note: See the chart located on the product page for user selected gearing information.

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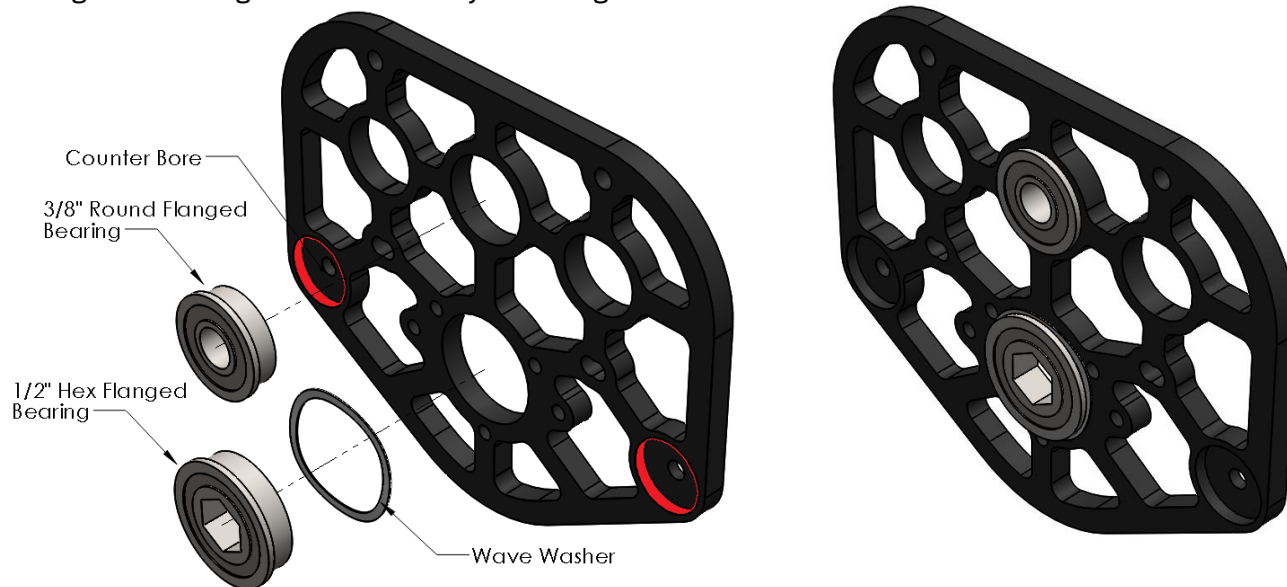
Step 6:

Insert the User Selected DOG and 1/16" Spacer.



Step 7:

Insert the 3/8" Round Flanged Bearing into the Front Gearbox Plate. Slide the Wave Washer over the 1/2" Hex Flanged Bearing then insert into Front Gearbox Plate. The 1/2" Hex Flanged Bearing will not sit fully flush against the Front Gearbox Plate.



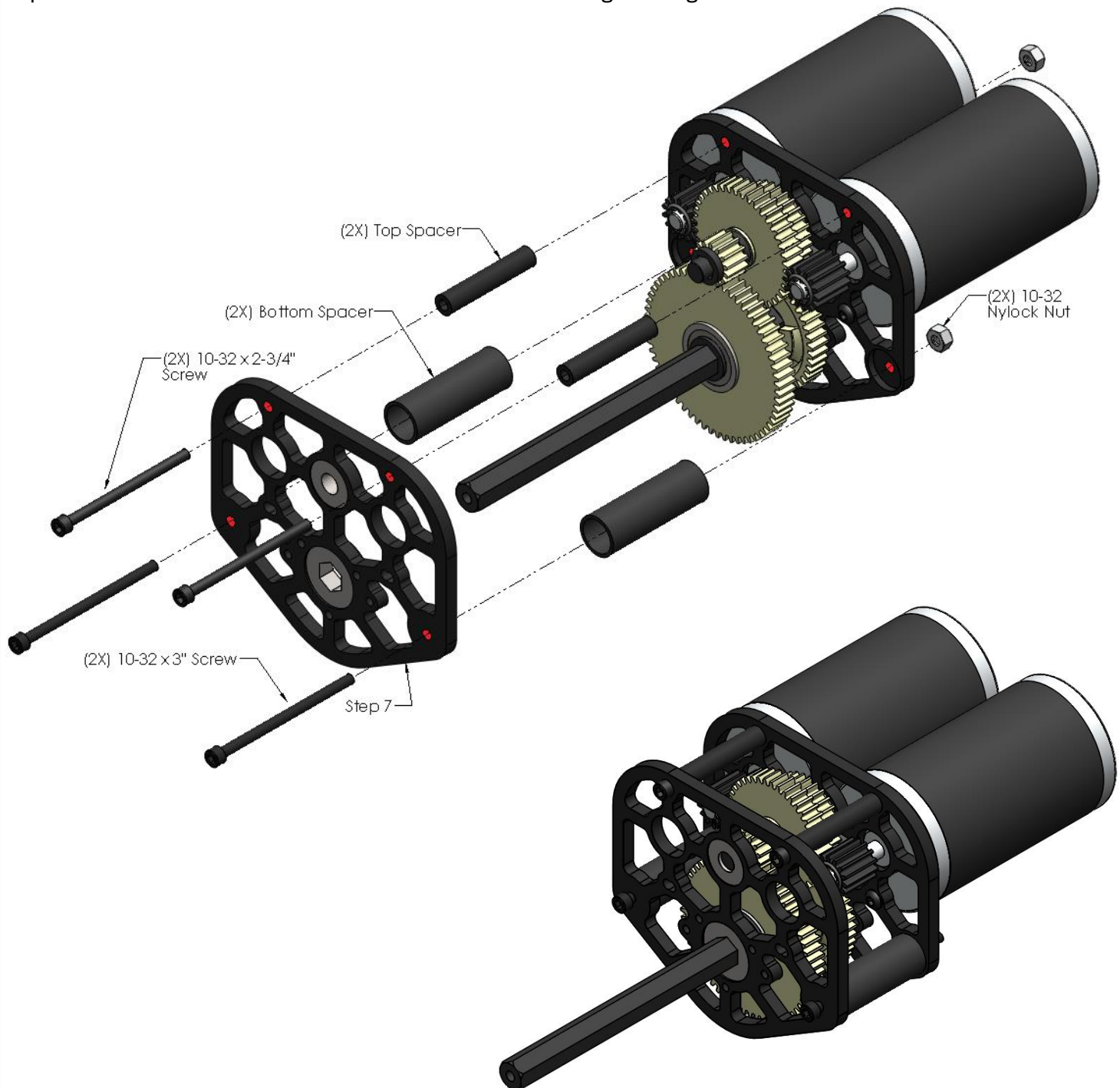
Note: The bearings need to be installed on the side of the plate with the Counter Bores.

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Step 8:

Attach Step 7 using (2X) 10-32 x 3" screws, (2X) 10-32 x 2-3/4", (2X) Top Spacers, (2X) Bottom Spacers, and (2X) 10-32 Nylock Nuts. The 10-32 x 2-3/4" screws going through the Top Spacers screw into the mounting holes of two CIM Motors. Make sure the Bottom Spacers are seated in the Counter Bores before tightening.

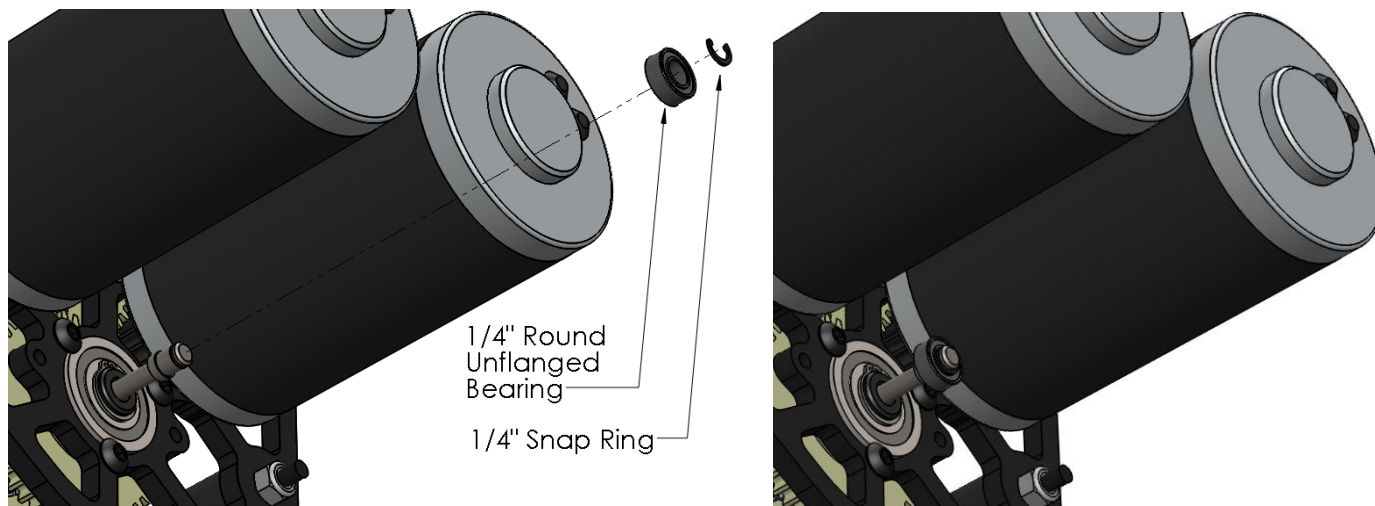


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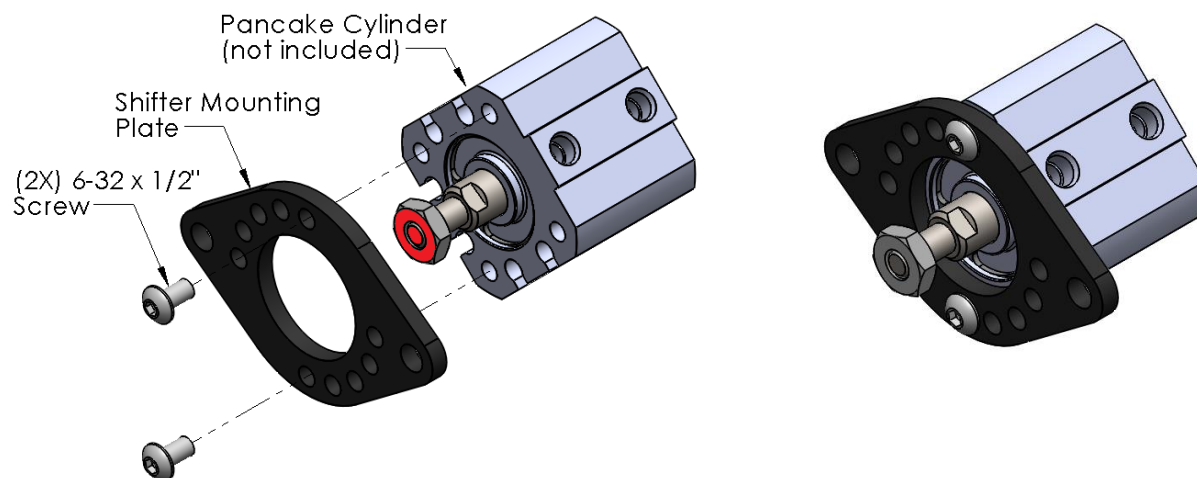
Step 9:

Insert the 1/4" Round Unflanged Bearing and the 1/4" Snap Ring onto the Shifter Rod.



Step 10:

Install choice of pneumatic fittings. Attach the Shifter Mounting Plate to the Pancake Cylinder using (2X) 6-32 x 1/2" screws.



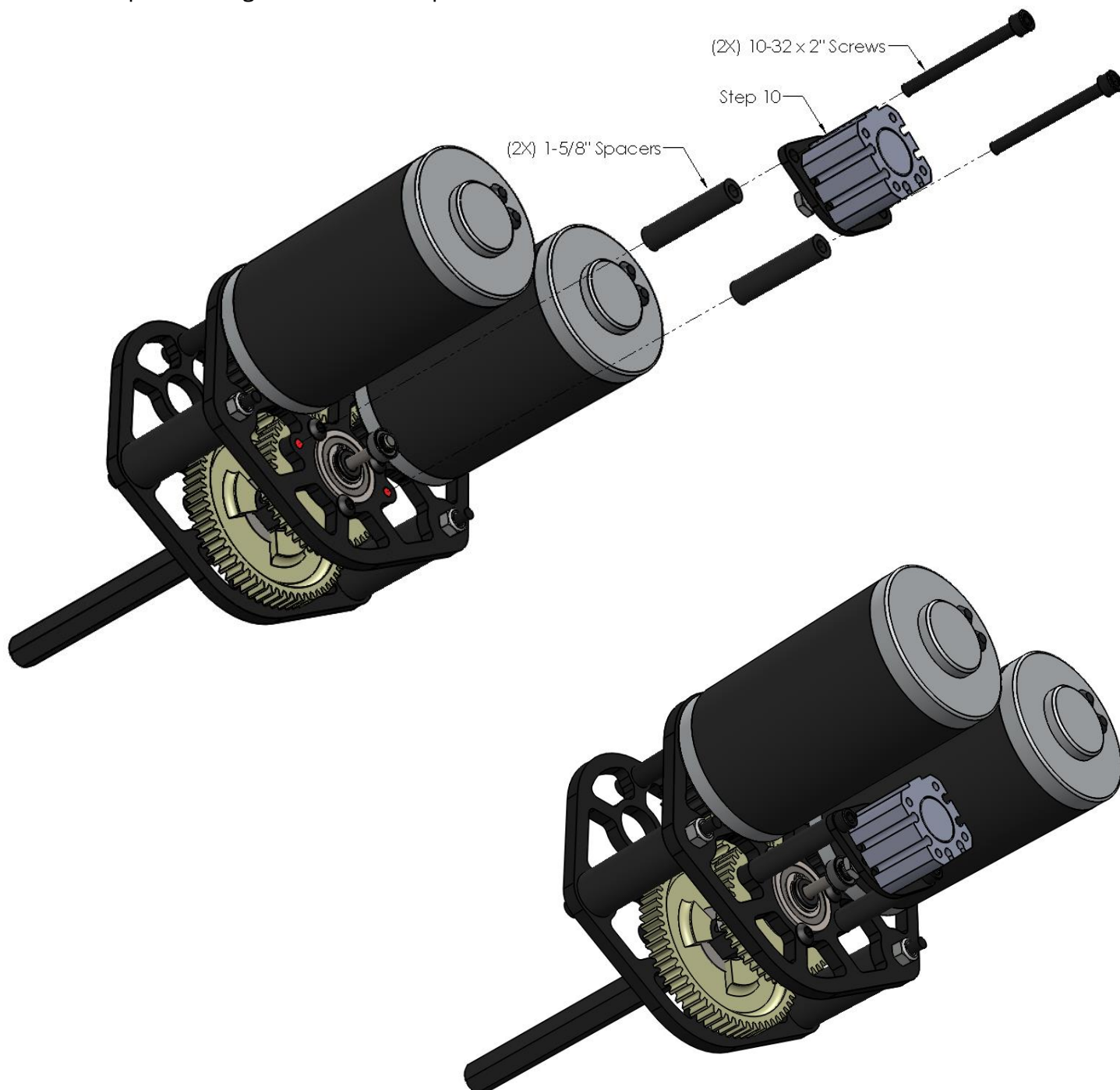
Note: The hex nut **MUST BE FLUSH** with the end of the piston rod.

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Step 11:

Attach Step 10 using (2X) 1-5/8" Spacers and (2X) 10-32 x 2" screws.

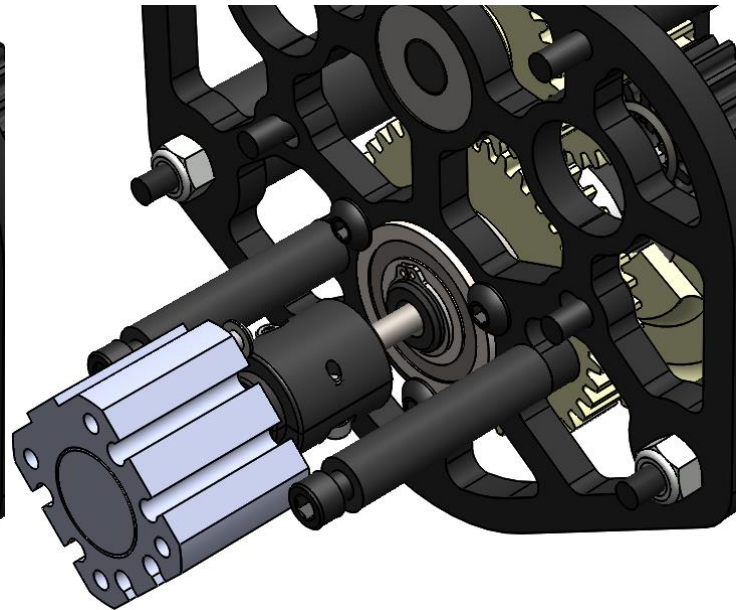
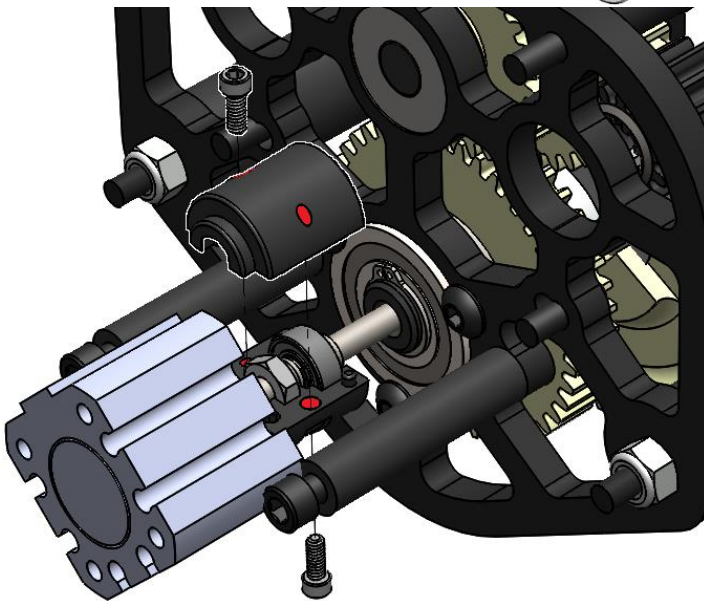
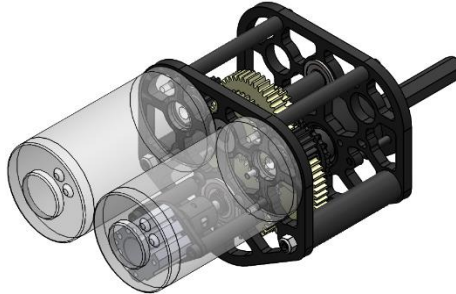


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Step 12:

Use a Pneumatic Coupler Half to capture the nut on the pancake rod and the bearing installed in Step 9. Make sure the nut is fully seated in the coupler then use (2X) 4-40 x 5/16" screws to attach the two halves.



Note: Double check that the hex nut is FLUSH with the end of the piston rod. Failure to properly assembly coupler may result in ratcheting under load.

